



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
841 Chestnut Building  
Philadelphia, Pennsylvania 19107

JAN 11 1993

Mr. Orlando Monaco  
Naval Facilities Engineering Command  
Northern Division, Mailstop #82  
Environmental Contracts Branch  
10 Industrial Highway  
Lester, Pennsylvania 19113

Re: Naval Air Warfare (Development) Center (NAWC) - Warminster,  
Pennsylvania

Dear Mr. Monaco:

Thank you for meeting with the EPA on January 8, 1993 to discuss Operable Unit One (OU-1) of the subject site. At this time, the EPA would like to elaborate further on several points discussed during the meeting and followup on several "action items".

As discussed, the EPA strongly recommends the inclusion of contaminated ground water associated with Sites 5, 6 and 7 under OU-1. The nature of ground water contamination in this area is very similar to ground water contamination from site-related releases west of Jacksonville Road. Based on the screening of technologies and process options performed by the Navy to date, the action alternative(s) for ground water associated with both the area west of Jacksonville Road and the area of Sites 5, 6 and 7 shall include the pumping and treatment of ground water. Given the potential treatment of ground water from these two areas would likely be more cost-effective if performed at one facility and given the potential for contaminated ground water from Sites 5, 6 and 7 to impact users of ground water, the EPA believes the Navy should make every effort to include ground water associated with Sites 5, 6 and 7 under OU-1.

As you are aware, the Remedial Investigation (RI) for OU-1 must be part of the Administrative Record when the Proposed Plan for OU-1 is issued for public comment. Therefore, the EPA strongly recommends that the RI for OU-1 address ground water associated with Sites 5, 6 and 7. As discussed, the RI for the balance of the site need not be finalized or included in the Administrative Record at the time the Proposed Plan for OU-1 is issued.

Please find below a followup to our discussion of EPA comments on the RI (see letter of December 29, 1992):

- p.4-8: Fig.4-5 - The subject maps (and tables indicating the rationale for each well installed during the RI to date) should be included in the RI workplan for future ground water investigations to help support the workplan.
- p.4-23: Fig. 4.4.3.3 - The available water level and production data should be included in the RI workplan for future ground water investigations to help support the workplan.
- Comment #2 on Risk Assessment: The UCLs need not be recalculated for purposes of the OU-1 RI and the associated Risk Assessment. However, the method of calculation of the UCLs for OU-1 should be clearly identified, as well as the method recommended by EPA guidance. It should also be indicated that the method used in the case of OU-1 is more conservative. For future RI work, the UCL should be calculated by the requested method.
- Comment #3 on Risk Assessment: It should be stated that the representative ground water concentrations may have been underestimated in this case. Attachment 2 to the letter of December 29, 1992 should be referenced as the method preferred by EPA Region III for calculating the representative concentrations.

As noted during our discussion regarding OU-1, the EPA has recently received two letters from Ron Sloto of the USGS regarding his investigation of hydrogeological conditions at NAWC and surrounding areas. These two letters (and associated enclosures) are included as Attachments 1 and 2.

With regard to the Focused Feasibility Study (FFS) for OU-1, please consult the guidance distributed during the meeting (Attachment 3). Note the first five Major Elements of the FFS are part of the RI for OU-1 (Site Description, Regional and Site Hydrogeology, Groundwater Use, Nature and Extent of Contamination and Risk Assessment). As a result, these elements need not be repeated or summarized in the FFS. The FFS can simply refer to the RI report for these elements and begin by identifying the remedial objectives for OU-1.

Per our agreement during the meeting, there is "substantial uncertainty regarding the ability of a remedy to restore ground water to drinking water quality to beneficial uses" in this case. It was agreed "an interim remedial action to minimize plume migration and initiate ground water restoration" is appropriate

while "additional information is collected to better assess the practicality of aquifer resoration prior to the determination of final cleanup levels" (see EPA OSWER Directive 9283.1-03 dated October 10, 1990). As such, the seventh Major Element of the FFS (ARARs) should not include final ARARs for ground water quality. Rather, this section may identify potential ground water restoration goals (e.g. Pennsylvania "background" ARAR, federal MCLs, etc.) The ARARs for ground water quality shall be identified in a subsequent final ROD for OU-1. As agreed during the meeting, the collection of the additional information referenced in the paragraph above may be considered RI work. In this case, the cost of the necessary work need not be estimated as part of the detailed alternative analysis section of the FFS.

The EPA has several concerns regarding the schedule for OU-1 proposed by the Navy (see Attachment 4). In all cases, the EPA must have at least three full working days to review a document prior to inclusion of the document in the AR. The Proposed FS schedule provides the EPA only one day for review of the Final FS prior to inclusion in the AR, while the proposed schedule for the Proposed Plan provides the EPA no opportunity to review the Proposed Plan prior to inclusion in the AR. In addition, the proposed ROD schedule provides the EPA less than three working days to sign the ROD and provide the ROD to the Navy for inclusion in the AR. Regarding the proposed date of April 24 for releasing the Proposed Plan, this date may be too late should extensive comments be received at the end of the public comment period. With regard to the proposed FS schedule, we agreed that a Final Draft FS was unnecessary. As noted above, the EPA simply requests three full days to review (and potentially comment on) the Final FS prior to inclusion in the Administrative Record. In light of the comments above, the EPA proposes the schedule included as Attachment 5.

Please note the attached schedule should not preclude the Navy and the EPA from working together as a team at any point during this process. Guidance in this regard is available in the "The Road to ROD", a document jointly prepared by the EPA and DOD in January, 1992.

Finally, please note that in the letters of December 29, 1992 and January 5, 1993, the EPA determined the Navy must conduct expedited additional well survey work to assure that users of ground water are not at unacceptable risk due to exposure to ground water contaminated by releases from NAWC property west of Jacksonville Road and Sites 5, 6 and 7. Please provide the EPA a proposed schedule for performing the necessary well survey work by January 27, 1993. If this is not feasible, please let us know as soon as possible.

Based on the meeting of January 8, 1993, the EPA understands the Navy is in agreement with the nature and scope of OU-1 as described in EPA's letter of December 29, 1992. Please notify us in writing as soon as possible if this is not the case. In addition, should you not agree with the contents of this letter in any case, including the proposed schedule for OU-1 (see Attachment 5), please notify the EPA in writing as soon as possible.

Should you have any questions regarding the above, please give me a call at 215-597-0549.

Sincerely,



Darius Ostrauskas  
Remedial Project Manager

cc: Ben Mykijewycz  
David Kennedy, PADER  
Frank Kurdziel, NAWC